UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,718	11/25/2003	Tara Nicole Sherman	11872/US/2	9808
Scott D. Rother	7590 12/04/200 lberger	EXAMINER		
DORSEY & WHITNEY LLP Intellectual Property Department 50 South Sixth Street, Suite 1500 Minneapolis, MN 55402-1498			RAMANA, ANURADHA	
			ART UNIT	PAPER NUMBER
			3775	
			MAIL DATE	DELIVERY MODE
			12/04/2008	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/723,718	SHERMAN ET AL.
Office Action Summary	Examiner	Art Unit
	Anu Ramana	3775
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut-Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 29 A     This action is <b>FINAL</b> . 2b) ☑ This     Since this application is in condition for allowated closed in accordance with the practice under A	s action is non-final. ince except for formal matters, pro	
Disposition of Claims		
4)  Claim(s) 1-34 is/are pending in the application 4a) Of the above claim(s) 1-19 is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) 20-34 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	or election requirement.	
10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documen</li> <li>2. Certified copies of the priority documen</li> <li>3. Copies of the certified copies of the priority application from the International Burea</li> <li>* See the attached detailed Office action for a list</li> </ul>	ts have been received. ts have been received in Applicationity documents have been receive au (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s) 1) ☑ Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate

Art Unit: 3775

### **DETAILED ACTION**

Page 2

#### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 29, 2007 has been entered.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 20-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation, "uncrosslinked" is deemed to be new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-21 and 25-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Application/Control Number: 10/723,718

Art Unit: 3775

In claim 20, the recitation "at an elevated swelling rate that is at least 125% greater than the natural swelling rate" contradicts the earlier recitation of "configured to hydrate from a dehydrated state to a hydrated state at natural swelling rate."

Page 3

In claim 21, the recitation "hydrates to an elevated equilibrium swelling level that is at least 110% greater than the natural equilibrium swelling level" contradicts the earlier recitation of "configured to hydrate from a dehydrated state to a natural equilibrium swelling level."

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22-24 and 29-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Bao (US 5192,326).

Bao discloses a prosthetic nucleus 10 having a hydrogel core wherein the hydrogel core can be either crosslinked or uncrosslinked polymers including: salts of poly(acrylic acid) or polyacrylates, poly(vinylalcohols) or polyacrylonitrile (col. 8, lines 19-35, col. 11, lines 29-42 and col. 14, lines 13-61).

Bao also discloses that the degree of swelling capability or swelling rate or equilibirum water content or equilibrium swelling level of the hydrogel can be increased by the introduction of charged groups for e.g., cationic monomers. Bao also identifies salts of polyacrylic acid or polyacrylates to be a superabsorbent. It is noted that a salt would inherently contain a cation.

Art Unit: 3775

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 20-21 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bao et al. (US 5,192,326).

Bao discloses all elements of the claimed invention except for: (1) an equilibrium swelling level that is at least 110% greater than the natural equilibrium swelling level; and (2) an elevated swelling rate that is at least 125% greater than the natural swelling rate.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have adjusted the introduction of charged groups in the Bao hydrogel core to obtain an equilibrium swelling level at least 110% greater than the natural equilibrium swelling level or an elevated swelling rate that is at least 125% greater than the natural swelling rate, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

#### Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Application/Control Number: 10/723,718 Page 5

Art Unit: 3775

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anu Ramana whose telephone number is (571) 272-4718. The examiner can normally be reached Monday through Friday between 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached at (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR December 2, 2008

> /Anu Ramana/ Primary Examiner, Art Unit 3775